Experimental Neurology

VOLUME 51, 1976

EDITOR

CARMINE D. CLEMENTE, *University of California, Los Angeles*

MANAGING EDITOR

LOUISE H. MARSHALL, *University of California, Los Angeles*

EDITORIAL BOARD

LLOYD GUTH
EDWARD KOENIG
RONALD MELZACK
WILLIAM D. WILLIS, JR.
WILLIAM F. WINDLE, *Chairman*

ACADEMIC PRESS
New York and London
A Subsidiary of Harcourt Brace Jovanovich, Publishers

Copyright © 1976 by Academic Press, Inc.
ALL RIGHTS RESERVED

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the copyright owner.

CONTENTS OF VOLUME 51

NUMBER 1, APRIL 1976

PETER K. LAW, ETHEL COSMOS, JANE BUTLER, AND ALAN J. MCCOMAS. The Absence of Dystrophic Characteristics in Normal Muscles Successfully Cross-Reinnervated by Nerves of Dystrophic Genotype: Physiological and Cytochemical Study of Crossed Solei of Normal and Dystrophic Parabiotic Mice. 1

ELEANOR H. BOYD, EUGENE S. BOYD, AND L. E. BROWN. Long-Latency Corticocortical Evoked Responses in Squirrel Monkey Frontal Cortex. 22

LYNN C. OATMAN. Effects of Visual Attention on the Intensity of Auditory Evoked Potentials. 41

JAMES R. LACKNER. The Auditory Characteristics of Tinnitus Resulting from Cerebral Injury. 54

RENÉE P. WISE AND RAYMOND D. LUND. The Retina and Central Projections of Heterochromic Rats. 68

JOHN O'KEEFE. Place Units in the Hippocampus of the Freely Moving Rat. 78

I. SUMITOMO, MEGUMI NAKAMURA, AND K. IWAMA. Location and Function of the So-called Interneurons of Rat Lateral Geniculate Body. 110

KONSTANTIN-ALEXANDER HOSSMANN AND SUGURU TAKAGI. Osmolality of Brain in Cerebral Ischemia. 124

P. R. C. HOWE, B. G. LIVETT, AND L. AUSTIN. Increased Binding of α-Bungarotoxin in Dystrophic Mouse Muscle. 132

A. FORSTER AND T. W. STONE. Evidence for a Cardiovascular Modulation of Central Neuronal Activity in Man. 141

RODERICK VAN BUSKIRK AND JAMES L. MCGAUGH. Retrograde Amnesia and Brain Seizure Activity in Mice: Strain Differences. 150

E. K. SAUERLAND AND R. M. HARPER. The Human Tongue during Sleep: Electromyographic Activity of the Genioglossus Muscle. 160

JOHN G. PARNAVELAS AND ALBERT GLOBUS. The Damaging Effects of Continuous Illumination on the Morphology of the Retina of the Rat. 171

A. A. FAIERS, F. R. CALARÈSU, AND G. J. MOGENSON. Factors Affecting Cardiovascular Responses to Stimulation of Hypothalamus in the Rat. 188

J. L. CROCKETT, V. R. EDGERTON, S. R. MAX, AND R. J. BARNARD. The Neuromuscular Junction in Response to Endurance Training. 208

ALBERT B. BUTLER, L. JAMES WILLMORE, PETER M. FULLER, AND NORMAN H. BASS. Focal Alteration of Dendrites and Astrocytes in Rat Cerebral Cortex during Initiation of Cobalt-Induced Epileptiform Activity. 216

C. SEROUGNE, C. LEFEVRE, AND F. CHEVALLIER. Cholesterol Transfer between Brain and Plasma in the Rat: A Model for the Turnover of Cerebral Cholesterol. 229

M. A. B. BRAZIER, P. H. CRANDALL, AND G. O. WALSH. Enhancement of EEG Lateralizing Signs in Temporal Lobe Epilepsy: A Trial of Diazepam. 241

RESEARCH NOTES

WILLIAM W. MORGAN AND P. KEVIN RUDEEN. Temporal Study of 5-Hydroxyindoleacetic Acid Normalization during Recovery from Immobilization Stress. 259

M. GADEA-CIRIA. Cerebellar Control of Activity of the Feline Oculomotor System during Paradoxical Sleep. 263

ARTHUR EBERSTEIN, JOSEPH GOODGOLD, AND RUTH JOHNSTON. Myotonia Induced in Denervated Muscles 266
MICHAEL E. CORCORAN, JUHN A. WADA, AKIRA WAKE, AND HARALD URSTAD. Failure of Atropine to Retard Amygdaloid Kindling 271

NUMBER 2, MAY 1976

EDITORIAL 277
LYNN WECKER AND WOLF-D. DETTBARN. Paraoxon-Induced Myopathy: Muscle Specificity and Acetylcholine Involvement 281
G. ZANCHIN, H. SERSHEN, AND A. LAJTHA. The Effect of Hyperosmolal Urea on the Transport of Amino Acids into Rat Brain 292
SHIN'ICHI SHOJI, AKIO TAKAGI, HIDEO SUGITA, AND YASUO TOYOKURA. Dysfunction of Sarcoplasmic Reticulum in Rabbit and Human Steroid Myopathy. 304
FREDERICK J. SAMAHA AND WILLIAM H. THIES. Actomyosin Changes in Muscles with Altered Function 310
MARGARET HOLLYDAY AND LORNE MENDELL. Analysis of Moving Supernumerary Limbs of *Xenopus laevis* 316
R. RAJALAKSHMI AND H. L. NAKHASI. Effects of Neonatal Undernutrition on the Lipid Composition of the Spinal Cord in Rats 330
JANETT TRUBATCH AND A. VAN HARREVELD. Reflex Figures in the Decerebrate and Spinal State 337
J. L. DE VITO AND D. M. SIMMONS. Some Connections of the Posterior Thalamus in Monkey 347
JOHN B. HORNBY AND JAMES D. ROSE. Responses of Caudal Brain Stem Neurons to Vaginal and Somatosensory Stimulation in the Rat and Evidence of Genital-Nociceptive Interactions 363
DAVID K. RYUGO AND NORMAN M. WEINBERGER. Corticofugal Modulation of the Medial Geniculate Body 377
MADGE E. SCHEIBEL, THOMAS L. DAVIES, AND ARNOLD B. SCHEIBEL. Ontogenetic Development of Somatosensory Thalamus. I. Morphogenesis 392
P. VAN HASSELT. Facial Reflexes Evoked by Electrical Stimulation of Peripheral Facial Nerve Branches in the Cat: Experiments of the Auriculotemporal-Facial Nerve Anastomoses 407
LLOYD GUTH. Functional Plasticity in the Respiratory Pathway of the Mammalian Spinal Cord 414
DONALD RAMER AND JOHN P. J. PINEL. Progressive Intensification of Motor Seizures Produced by Periodic Electroconvulsive Shock 421
P. K. LAW, H. L. ATWOOD, AND A. J. MCCOMAS. Functional Denervation in the Soleus Muscle of Dystrophic Mice 434
EDGAR A. LUCAS AND RONALD M. HARPER. Periodicities in the Rate of On-Demand Electrical Stimulation of the Mesencephalic Reticular Formation to Maintain Wakefulness 444
RICHARD A. MESHER AND ALLEN R. WYLER. Burst Structure in Developing Penicillin Epileptic Feline Foci 457
BLAIR H. TURNER AND MARGARET E. KNAPP. Projections of the Nucleus and Tracts of the Stria Terminalis following Lesions at the Level of the Anterior Commissure 468
DAVID DUBUISSON AND RONALD MELZACK. Classification of Clinical Pain Descriptions by Multiple Group Discriminant Analysis 480
MARGARET H. COOPER AND PAUL A. YOUNG. Cortical Projections to the Inferior Colliculus of the Cat 488

A. F. R. Wolfe, W. F. Dryden, I. G. Marshall, and E. M. Pantelouris. Pharmacological Aspects of Neuromuscular Transmission in the Thymus Deficient Nude (Nu/Nu) Mouse 503

Research Note

Jay D. Glass and Gerhard H. Fromm. Visually Evoked Potential from Specific and Nonspecific Cortex in Kitten 510

Number 3, June 1976

Ruggero Fariello. Forebrain Influences on an Amygdaloid Acute Focus in the Cat 515

D. G. Jones and Susan E. Dyson. Synaptic Junctions in Undernourished Rat Brain—An Ultrastructural Investigation 529

E. X. Albuquerque, J. E. Rash, R. F. Mayer, and J. R. Satterfield. An Electrophysiological and Morphological Study of the Neuromuscular Junction in Patients with Myasthenia Gravis 536

Michael R. Best and Phillip J. Best. The Effects of State of Consciousness and Latent Inhibition on Hippocampal Unit Activity in the Rat during Conditioning 564

M. G. Pluskal and R. J. Pennington. Protein Synthesis by Ribosomes from Normal and Denervated Red and White Muscle 574

Herbert Yellin. Survival and Possible Trophic Function of Neonatal Spinal Cord Grafts in the Anterior Chamber of the Eye 579

G. Richard Gates and Chia-Shong Chen. Priming for Audiogenic Seizures in BALB/c Mice as a Function of Stimulus Exposure Duration and Age 593

U. Yinon. Eye Rotation Surgically Induced in Cats Modifies Properties of Cortical Neurons 603

D. W. Young and K.-M. Gottschaldt. Neurons in the Rostral Mesencephalic Reticular Formation of the Cat Responding Specifically to Noxious Mechanical Stimulation 628

John G. Parnavelas and Albert Globus. The Effect of Continuous Illumination on the Development of Cortical Neurons in the Rat: A Golgi Study 637

John G. Parnavelas. The Electroretinogram of Rats Reared in Continuous Illumination 648

B. J. Hoffer, R. Freedman, D. J. Woodward, J. W. Daly, and P. Skolnick. β-Adrenergic-Control of Cyclic AMP-Generating Systems in Cerebellum: Pharmacological Heterogeneity Confirmed by Destruction of Interneurons... 653

M. J. Burton, E. T. Rolls, and F. Mora. Effects of Hunger on the Responses of Neurons in the Lateral Hypothalamus to the Sight and Taste of Food 668

Stephen C. Bondy, Janet L. Purdy, James E. Carroll, and Kenneth K. Kaiser. The Rate of Nutrient Supply to Normal and Denervated Slow and Fast Muscle, and Its Relation to Muscle Blood Flow 678

G. S. Sohal. An Experimental Study of Cell Death in the Developing Trochlear Nucleus 684

Research Note

David G. Changaris, Laurence M. Demers, Lanny C. Keil, and Walter B. Severs. Identification of Angiotensin 1 in the Rat and Human Pituitary Gland 699

Author Index for Volume 51 705

The Subject Index for Volume 51 will appear in the December 1976 issue as part of a cumulative index for the year 1976.